

**NAVY TRAINING SYSTEM PLAN**  
**FOR THE**  
**JOINT SERVICE FIXED SITE**  
**DECONTAMINATION SYSTEM**

**N78-NTSP-A-50-0116/I**

**JUNE 2001**

## **JOINT SERVICE FIXED SITE DECONTAMINATION SYSTEM**

### **EXECUTIVE SUMMARY**

The Joint Service Fixed Site Decontamination (JSFXD) System will provide a family of decontaminates and applicator systems that are less corrosive, less hazardous, and more environmentally friendly than existing decontaminants. The JSFXD will provide a capability to decontaminate fixed sites, ports of entry, airfields, logistics support bases, and key command and control centers, including personnel and mission essential equipment which have been exposed to the damaging effects of Nuclear, Biological, or Chemical warfare agents and/or contaminants. The JSFXD program is an effort to bring the existing Nuclear, Chemical, and Biological (NBC) program into synch with today's technology.

This document will become the Navy annex to the Joint System Training Plan (J-STRAP) and does not contain Marine Corps requirements. The Marine Corps is the lead service for JSFXD and will produce the J-STRAP, which will include all Marine Corps requirements.

JSFXD is an ACAT III program in the System Development and Demonstration Phase, currently approaching a Milestone B decision. JSFXD is being procured in Blocks with the following current IOC projections. IOC for Block I is fourth quarter FY02; Block II is fourth quarter FY04; and Block III is fourth quarter FY06.

The Navy does not have an NEC for NBC operators or maintainers, but relies on personnel with collateral duty assignment. Damage Controlman (DC) and Aviation Boatswain's Mates (Handler) (ABH) will be tasked as operators. Trained squadron contamination control and maintenance personnel will perform aircraft and support equipment decontamination. JSFXD will not require any increases in manpower.

**JOINT SERVICE FIXED SITE DECONTAMINATION SYSTEM**

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**JOINT SERVICE FIXED SITE DECONTAMINATION SYSTEM**

**LIST OF ACRONYMS**

ABH	Aviation Boatswain's Mate (Aircraft Handler)
AMTCS	Aviation Maintenance Training Continuum System
AS	Aviation Support Equipment Technician
ATG	Afloat Training Group
CBD	Chemical Biological Defense
CBR-D	Chemical Biological Radiological - Defense
CBT	Computer-Based Training
CD-ROM	Compact Disk - Read Only Memory
CMI	Computer Managed Instruction
CNO	Chief of Naval Operations
COTS	Commercial Off-The-Shelf
DC	Damage Controlman
DCTT	Damage Control Team Training
DT	Developmental Test
HM	Hospital Corpsman
HT	Hull Maintenance Technician
ICW	Interactive Courseware
I&KPT	Instructor and Key Personnel Training
IMI	Interactive Media Instruction
JSFXD	Joint Service Fixed Site Decontamination
JSSD	Joint Service Sensitive Equipment Decontamination
J-STRAP	Joint Service System Training Plan
LIPT	Logistic Integrated Product Team
LMI	Logistic Management Information
MTIP	Maintenance Training Improvement Program
NAVSEA	Naval Sea Systems Command
NBC	Nuclear, Biological, Chemical
NDI	Non-Developmental Item
NEC	Navy Enlisted Classification
NET	New Equipment Training

**JOINT SERVICE FIXED SITE DECONTAMINATION SYSTEM**

**LIST OF ACRONYMS**

NOBC	Navy Officer Billet Code
NTSP	Navy Training System Plan
OPO	OPNAV Principal Official
OT	Operational Test
PMA	Program Manager, Air
RFT	Ready For Training
SDK	Skin Decontamination Kit
STEP	Shipboard Training Enhancement Program
SWOS	Surface Warfare Officer School
TBD	To Be Determined
TD	Training Device
TIM	Toxic Industrial Material
TTE	Technical Training Equipment

**JOINT SERVICE FIXED SITE DECONTAMINATION SYSTEM**

**PREFACE**

This Initial Navy Training System Plan (NTSP) is an early look at the Joint Service Fixed Site Decontamination (JSFXD) System program. This is the first iteration of the Initial NTSP for the JSFXD program. This document explores the various employment and support alternatives currently under consideration for Naval aviation requirements. Since it is relatively early in the acquisition process, some definitive data was unavailable for inclusion in this version. This NTSP is a product of the Training Planning Process Methodology, as outlined in OPNAV publication P-751-3-9-97.

The requirements documented in this NTSP will be incorporated into the Joint System Training Plan (J-STRAP) as a Navy Annex. The Marine Corps is the lead service for the J-STRAP and will produce and document its own requirements in the J-STRAP.

PART I - TECHNICAL PROGRAM DATA

A. NOMENCLATURE-TITLE-PROGRAM

- 1. **Nomenclature-Title-Acronym.** Joint Service Fixed Site Decontamination (JSFXD) System
- 2. **Program Element.** 0604384BP

B. SECURITY CLASSIFICATION

- 1. **System Characteristics**..... Unclassified
- 2. **Capabilities**..... Unclassified
- 3. **Functions** ..... Unclassified

C. MANPOWER, PERSONNEL, AND TRAINING PRINCIPALS

- OPNAV Principal Official (OPO) Program Sponsor ..... CNO (N78)
- OPO Resource Sponsor..... CNO (N78)
- Functional Mission Sponsor (if applicable)..... CNO (N78)
- Developing Agency..... NAVAIRSYSCOM (AIR 4.1.8)
- Training Agency ..... CINCLANTFLT (N721)  
CINCPACFLT (N70)  
CNET (ETE32)
- Training Support Agency ..... NAVAIRSYSCOM (PMA205)  
COMNAVAIRESFOR
- Manpower and Personnel Mission Sponsor ..... CNO (N12)  
NAVPERSCOM (PERS-4, PERS-404)
- Director of Naval Training..... CNO (N795)

## **D. SYSTEM DESCRIPTION**

**1. Operational Uses.** The primary mission of the JSFXD System is to provide the capability to remove and/or neutralize Nuclear, Biological, Chemical (NBC) warfare agents and Toxic Industrial Materials (TIM) from fixed sites, ports of entry, airfields, ships, aircraft, logistics support bases, key command/control centers, and personnel, including those with open wounds.

**2. Foreign Military Sales.** No foreign military sales are planned at this time. This is a Joint program that includes the U.S. Army, U.S. Navy, U.S. Air Force, and U.S. Marine Corps.

**E. DEVELOPMENTAL TEST AND OPERATIONAL TEST.** Developmental Test (DT) and Operational Test (OT) for Block I Decontaminates began in December 1999 and will run through July 2001. DT and OT for Block II Applicator Systems are scheduled for September 2001 through June 2003, with Block III Skin Decontaminates Kits (SDK) scheduled for November 2004 through December 2005. Many mature Non-Developmental Item (NDI) or Commercial Off-The-Shelf (COTS) technologies are available and will be evaluated for possible use in the JSFXD Systems.

## **F. AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED.**

Eventually, all current decontaminates will be replaced by JSFXD. The JSFXD system is being developed in four blocks. Block I will provide a family of decontaminants that are less corrosive, less hazardous, and more environmentally friendly than existing decontaminants. Block II is a new family of applicators, and Block III is a new SDK that will replace the current M291 SDK. Block IV will address requirements that have been traded-off or are currently ill defined or undefined.

## **G. DESCRIPTION OF NEW DEVELOPMENT**

**1. Functional Description.** JSFXD System will be used to support all echelons of the Navy covering afloat, ashore, and deployed activities per requirements. This concept recognizes that Naval aircraft carriers and amphibious warfare ships are considered fixed sites. The objective family of systems will allow for the decontamination of permanent and operationally fixed sites to minimize the effects of an NBC or TIM hazard and restore operations safer and faster than with previous systems. Current systems are limited to basic detergent and water washes, and the use of High Test Hypochlorite (HTH) for shipboard external surfaces.

**a. Flight Operations.** For shipboard applications the JSFXD System will be used to decontaminate aircraft carriers, amphibious warfare ships, selected exterior surfaces, aircraft elevator platforms, flight decks, etc., including equipment (movable or fixed) located on these surfaces and shipboard personnel. Due to space constraints, Naval aviation requirements dictate the need for a two-man portable system for flight deck operations at sea. Additionally, the two-man portable system will be required for small detachments away from the ship and



certain expeditionary settings. For shore applications the JSFXD System will be used to decontaminate aircraft hangar spaces, ramps, support equipment, and personnel. Shore applications will include Marine Corps Air Stations and Expeditionary Air Fields.

**b. Aircraft.** Aircraft include all combat and support, both fixed and rotary wing. The JSFXD System will be used to decontaminate exteriors, ordnance, pods, drop tanks, support equipment, cargo, and personnel. Aircraft sensitive equipment, interiors, and aircrew sensitive equipment (night vision devices, radios, etc.) will be decontaminated with systems developed under the Joint Service Sensitive Equipment Decontamination (JSSED) program.

**c. Ships.** Ships are considered to be areas not associated with flight deck operations on carriers and amphibious warfare ships, cruisers, destroyers, frigates, light forces, mine forces, and selected auxiliary support ships and craft. If required in the future, for these Naval Sea Systems Command (NAVSEA) applications, it is anticipated that the two-man portable JSFXD System for aircraft carrier flight operations will also be used to decontaminate select exterior surfaces and equipment (movable or fixed) located on these surfaces, shipboard personnel, interior spaces, accompanying personnel, and equipment.

**d. Facilities.** Facilities are considered to be ports, piers, Naval Bases, Naval Construction Forces, logistics sites, warehouses, containerized facilities, ordnance sites, forward arming and refueling points, and airfields. If required in the future for these Naval Facilities (NAVFAC) applications and others, it is anticipated that the JSFXD system used by the Marine Corps and Air Force facilities groups will meet the requirements.

**2. Physical Description.** Preliminary studies indicate that the majority of decontamination requirements can be met with two decontaminates. Block I decontaminates will be in powder or liquid form. Block II applicators have been broken down into fixed, transportable, and two-man portable, and the containment systems into fixed and transportable. The fixed system is expected to be a large-scale system that will be used to apply decontaminants to large vehicles (trucks, planes, etc.). The transportable system is expected to be used to apply decontaminants on medium to large mobile or fixed equipment (cranes, High Mobility Multipurpose Wheeled Vehicle (HMMWV), etc.), facilities (buildings, shelters, etc.), and area (loading dock, airstrip, etc.). The two-man portable system will be used primarily to apply decontaminants on small to medium equipment. The Block III SDK physical description has not been determined and will be included in updates to this document when available.

**3. New Development Introduction.** JSFXD is a modernization retrofit and the introduction of a new capability.

**4. Significant Interfaces.** JSFXD will complement the JSSED System.

**5. New Features, Configurations, or Material.** JSFXD will use the latest technology to include the use of robotics and automation.

## H. CONCEPTS

**1. Operational Concept.** The JSFXD will be employed on the integrated battlefield as a means to remove, neutralize, or eliminate NBC/TIM hazards posing threats to military operations. JSFXD will be employed independently or in conjunction with conventional decontamination elements in the U.S. Marine Corps, U.S. Army, U.S. Air Force, and U.S. Navy in both tactical and peacetime environments.

**2. Maintenance Concept.** Maintenance, repair, and reconstitution tasks will be accomplished at the organizational level. The primary focus of effort will continue to be sortie generation and regeneration, as is the current maintenance policy for organizational level maintenance; repair and or replacement of parts will be accomplished by using units deployed in the field or at sea.

**a. Organizational.** Only periodic tasks required to maintain the system such as calibration, functional checks, cleaning, fluids servicing (if required), changing batteries, and light bulb replacement should be performed at this level.

**(1) Preventive Maintenance.** Periodic inspections and preventive maintenance tasks will be acceptable to ensure operational status and/or availability.

**(2) Corrective Maintenance.** Maintenance tasks and schedules are To Be determined (TBD).

**b. Intermediate.** TBD

**c. Depot.** Depot level repair of hardware components will only be undertaken if it is economically feasible. If depot repair is economically feasible, there will be one depot for all Services as determined by the Logistics Management Information (LMI) process.

**d. Interim Maintenance.** A provisioning conference team will be established using the Logistic Integrated Project Team (LIPT) and contractor personnel. The provisioning team will schedule provisioning, data reviews, and document joint replacement and/or repair parts selection. The LMI process will identify all maintenance levels, maintenance tasks, times, personnel requirements, and spare and repair parts to support all services. One single item manager will be selected by the LIPT, and each other service will assign a secondary item manager.

**e. Life Cycle Maintenance Plan.** A 10-year life cycle is assumed for each block once the first production articles are introduced.

**3. Manning Concept.** Chemical Biological Defense (CBD) is similar to other programs such as fire fighting and damage control in that it is an all hands evolution to protect and preserve the warfighting capabilities of the command. However, within each command certain individuals or groups of individuals are given the primary responsibility to operate or maintain specific pieces of CBD equipment.

**a. Mean Time Between Scheduled Maintenance.** The Operational Requirements Document objective for the Mean Time Between Scheduled Maintenance is 720 hours, with a 30-minute objective for repair.

**b. Proposed Utilization.** The objective for Mean Time Between Operational Mission Failure is not less than 2160 hours. Equipment required for mission essential functions will be hardened to ensure degradation of not more than 20 percent will occur over a 30-day period, with 5 exposures to NBC/TIM contaminants, decontaminants, and standard decontamination procedures.

**4. Training Concept.** The Navy does not have a Navy Enlisted Classification (NEC) for NBC operators or maintainers, but relies on personnel with collateral duty assignments. Damage Controlman (DC) and Aviation Boatswain's Mate (Aircraft Handler) (ABH) will be tasked as operators. Trained squadron maintenance personnel will perform aircraft and support equipment decontamination.

**a. Initial Training.** Instructor and Key Personnel Training (I&KPT) will begin at the start of each block. I&KPT is required at least twelve months prior to the initial system fielding. This lead time will provide sufficient time to develop or modify training courses.

New Equipment Training (NET) will be required when fielding JSFXD. Resource constraints may preclude the use of face-to-face NET teams when JSFXD is fielded. Therefore, training materials, lesson plans, Interactive Media Instruction (IMI), Distance Learning (DL), or Computer-Based Training (CBT) may be the primary source of personnel and supervisor training.

Block I is a family of new decontaminates and the only training required will be the NET. No new operator or maintenance training will be required.

Block II will require training for operators and maintainers. Once the applicators are defined, a final determination can be made for operators and maintainers. It is anticipated that DC and ABH will be operators and Aviation Support Equipment Technicians (AS) will maintain the two-man portable applicator. The technical description for mobile and fixed site applicators is very limited. As the program develops and the requirements are better defined the specific operator and maintainer requirements can be determined.

Block III will be the personnel and/or casualty decontamination system that will replace or enhance the capabilities of the M291 SDK currently in use. Block III will require no additional training.

<b>Title .....</b>	<b>JSFXD Initial Training</b>
<b>Description .....</b>	This introductory course provides training for instructors and key personnel in the operations and maintenance for the JSFXD systems.

Location .....	Contractor facilities
Length .....	2 days (estimated)
RFT date .....	FY02
TTE/TD .....	TBD
Prerequisites .....	None

**b. Follow-on Training.** JSFXD follow-on training will augment the training provided during installation and fielding, and provides a continued source of training to support new operators as well as those previously trained who are transferred to other assignments.

Officer training at The Surface Warfare Officers School (SWOS) in Newport, Rhode Island, will require modification. SWOS teaches Damage Control, Disaster Preparedness, and Repair Party Leader courses that include Chemical, Biological, and Radiological (CBR) attack. Shore-based Officers can receive the same type training in course *A-494-0006, Disaster Preparedness Operations and Training Specialist*, located at Fort Leonard Wood, Missouri. The Navy Officer Billet Code (NOBC) 2175 Disaster Preparedness Officer and 2765 NBC Defense Officer are awarded after completion of these courses.

**(1) Operator.** Revisions to existing courses will incorporate JSFXD requirements. Navy operator familiarity training will be conducted at the DC “A” school at Naval Training Center, Great Lakes, Illinois. Navy operator and limited maintenance training will also be incorporated into two separate courses both taught at Fort Leonard Wood. Course *A-495-2062A, Shipboard Chemical Biological Radiological-Defense (CBR-D) Operations and Training Specialist*, awards the NEC 4805, and course *A-494-0006, Disaster Preparedness Operations and Training Specialist*, awards the NEC 9598. Training for enlisted aviation personnel and civilians will be conducted at various other school locations as determined.

<b>Title .....</b>	<b>Disaster Preparedness Operations and Training</b>
<b>CIN .....</b>	A-494-0006
<b>Model Manager ..</b>	Naval Construction Training Center Detachment
<b>Description .....</b>	<p>This course provides training to officers, civilians, and enlisted personnel having responsibility for disaster preparedness, including:</p> <ul style="list-style-type: none"> <li>° Disaster Preparedness Plan</li> <li>° Organization and Responsibilities</li> <li>° Disaster Preparedness Plan and Supporting Document Preparation</li> <li>° Peacetime Response and Recovery Requirements for Major Accidents and Disasters</li> <li>° Wartime Protection</li> <li>° Response and Recovery Operations</li> <li>° Detection, Protection, and Decontamination due to Nuclear, Biological, and Chemical Contamination</li> <li>° Chemical Warfare Defense Operations</li> <li>° Associated Reports, Related Administrative and Supervisory Requirements</li> <li>° Installation Information and Training Program and Inspection Program, to include Program Analysis Pertinent to Disaster Preparedness</li> <li>° Instructor Fundamentals</li> </ul> <p>Upon completion, the student will be able to perform the duties of a Disaster Preparedness Operator in a squadron environment under limited supervision.</p>
<b>Location .....</b>	Naval Construction Training Center Detachment, Fort Leonard Wood
<b>Length .....</b>	26 days
<b>RFT date .....</b>	Currently available
<b>Skill identifier ....</b>	<ul style="list-style-type: none"> <li>° NOBC 2175</li> <li>° NEC 9598</li> </ul>
<b>TTE/TD .....</b>	TBD

Prerequisites .....	<ul style="list-style-type: none"> <li>° Officer personnel (O-1 through O-3)</li> <li>° Enlisted personnel (E-5 through E-8), open to all ratings</li> <li>° Must meet the OPNAVINST 6110.1 series physical fitness requirements</li> <li>° Must bring optical inserts for MCU-2P Mask or be able to see 2-/40 (near or distant) or better in one eye</li> <li>° Pregnant members are not allowed to attend this course due to the nature of training</li> </ul>
<b>Title .....</b>	<b>Shipboard Chemical, Biological, and Radiological Defense Operations and Training Specialist</b>
CIN .....	A-495-2062
Model Manager ..	Naval Construction Training Center Detachment
Description .....	<p>This course provides CBR-D training to enlisted personnel with source rating DC, Hull Maintenance Technician (HT), or Hospital Corpsman (HM), including:</p> <ul style="list-style-type: none"> <li>° Practical Training for Chemical/Biological Agents</li> <li>° Instrument/Operational Aspects</li> <li>° Chemical and Biological Decontamination and Survey Operations</li> <li>° Practical Training with Radiac Instruments/Operational Aspects</li> <li>° Radiation Surveys</li> <li>° Calculations and Decontamination</li> </ul> <p>Upon completion, the student will be prepared to conduct CBR-D training at Training Commands and aboard ship for CBR-D, and advise on integration of CBR-D operations in a squadron environment under limited supervision.</p>
Location .....	Naval Construction Training Center Detachment, Fort Leonard Wood
Length .....	12 days
RFT date .....	Currently available
Skill identifier ....	NEC 4805
TTE/TD .....	TBD

Prerequisites .....  
 ° Enlisted personnel (E-5 through E-9)  
 ° Source ratings DC, HT, and HM  
 ° Must meet the OPNAVINST 6110.1 series physical fitness requirements  
 ° Must bring optical inserts for MCU-2P Mask or be able to see 2-/40 (near or distant) or better in one eye  
 ° Pregnant members are not allowed to attend this course due to the nature of training

**Title ..... Damage Control Repair Party Leader**

CIN ..... K-495-0040

Model Manager .. Fleet Training Center San Diego

Description ..... This course provides training to enlisted personnel in advanced damage control theory and techniques as required for assignment to Repair Party Leader billets aboard a surface ship. This training is group-paced classroom and practical, presented in two parts. Phase I, Damage Control Fundamentals/Systems, includes:

- ° Preliminary Actions Before Damage Occurs
- ° Minimize and Localize Damage After Occurrence
- ° Damage Control Equipment and Systems
- ° Emergency Repairs to Control Fires and Flooding and to Preserve Ship's Stability and Buoyancy

Phase II, Chemical, Biological, and Radiological Defense, includes:

- ° Technical Aspects and Practical Applications of Chemical and Biological Defense
- ° Individual Protective Clothing and Equipment
- ° Shipboard Decontamination and Chemical Agent Detection
- ° Nuclear Defense

Upon completion, the student will be able manage repair party personnel in casualty situations under all shipboard readiness conditions with supervision.

Location .....	<ul style="list-style-type: none"> <li>° Mine Warfare Training Center, Ingleside, Texas</li> <li>° Fleet Training Center, San Diego, California</li> <li>° Fleet Training Center, Mayport, Florida</li> <li>° Fleet Training Center, Norfolk, Virginia</li> <li>° Afloat Training Group (ATG) Middle Pacific (MIDPAC), Pearl Harbor, Hawaii</li> </ul>
Length .....	12 days
RFT date .....	Currently available
Skill identifier ....	None
TTE/TD .....	TBD
Prerequisites .....	<ul style="list-style-type: none"> <li>° Paygrades E-5 and above</li> <li>° Completion of Personnel Qualification Standard for Basis Damage Control, NAVEDTRA 43119G (series)</li> <li>° Advanced Damage Control Emergency Parties 100 and 200 Sections, NAVEDTRA 43119G</li> <li>° Medical screening by parent command</li> </ul>
 <b>Title .....</b>	 <b>Surface Warfare Officer Damage Control Assistant</b>
CIN .....	A-4G-0020
Model Manager ..	Surface Warfare Officers School Command
Description .....	<p>This course provides training to Warrant, Line Officers, and Senior Enlisted personnel for assignment to the Damage Control Assistant billet aboard a surface ship, including:</p> <ul style="list-style-type: none"> <li>° Repair Division Administration and Responsibilities</li> <li>° Damage Control Administration and Training</li> <li>° Damage Control Equipment and Systems</li> <li>° Damage Control Petty Officer Program Requirements, Equipment, and Maintenance Procedures</li> <li>° Stability and Buoyancy</li> <li>° Battle Damage Evaluation and Containment Techniques</li> <li>° Chemical, Biological, and Radiological Defense Management</li> <li>° Gas Free Engineering</li> </ul>
Location .....	Surface Warfare Officers School Command
Length .....	47 days



RFT date .....	Currently available
Skill identifier ....	NOBC 9308
TTE/TD .....	TBD
Prerequisites .....	Medical screening for Advanced Shipboard Fire Fighting (J-494-0419)

<b>Title .....</b>	<b>Repair Party Leader/Damage Control Short Course</b>
CIN .....	A-4H-0155
Model Manager ..	Surface Warfare Officers School Command
Description .....	<p>This course provides training to Line Officers with training required for assignment to the Repair Party Leader billet aboard a surface ship, including:</p> <ul style="list-style-type: none"> <li>° Damage Control Repair Locker Administration and Training</li> <li>° Damage Control Equipment and Systems</li> <li>° Stability and Buoyancy</li> <li>° Battle Damage Evaluation and Containment Techniques</li> <li>° Chemical, Biological, and Radiological Defense Procedures and Techniques</li> </ul>
Location .....	Surface Warfare Officers School Command
Length .....	15 days
RFT date .....	Currently available
Skill identifier ....	None
TTE/TD .....	TBD
Prerequisites .....	<ul style="list-style-type: none"> <li>° 4J-0154, SWO Core Phase I</li> <li>° Surface Warfare Officer Core Phase II Basic (Platform)</li> </ul>

**(2) Maintenance.** Revisions to existing courses will incorporate JSFXD requirements. The task for the two-man portable applicator is currently taught in course *E-602-7090, (Afloat) Support Equipment Internal Combustion Engines and Related Systems Intermediate Maintenance*. The mobile and fixed site applicator systems are yet to be defined; therefore, the maintenance requirement are not included in this NTSP, but will be added in future updates.

All current organizational level maintenance courses are in the process of integrating CBT with its basic elements of Computer-Managed Instruction (CMI), Computer-Aided Instruction (CAI), Interactive Courseware (ICW), and Aviation Maintenance Training Continuum System (AMTCS) Electronic Modules into their curricula for classroom presentation and management.

Title .....	<b>(Afloat) Support Equipment Internal Combustion Engines and Related Systems Intermediate Maintenance</b>
CIN .....	E-602-7090
Model Manager...	NAMTRAU North Island
Description.....	<p>This course provides training to the first tour Aviation Support Equipment Technician, including:</p> <ul style="list-style-type: none"> <li>° Maintenance and Administration Duties</li> <li>° Technical Publications and Forms</li> <li>° AC and DC Power Generating and Motor Driven Equipment</li> <li>° Internal Combustion and Gas Turbine Engine Operating Principles</li> <li>° Construction, Mechanical, and Electrical Systems</li> <li>° Chassis and Brake Systems</li> <li>° Power Train Theory</li> <li>° Hydraulic and Air Conditioning Fundamentals and Maintenance</li> </ul> <p>Upon completion, the student will be able to perform duties as a Support Equipment Technician under supervision. The student will continue in the training track to earn NEC 7618, Afloat Support Equipment Technician.</p>
Location .....	NATTC Pensacola
Length.....	114 days
RFT date .....	Currently available
Skill identifier .....	NEC 7618
TTE/TD .....	TBD
Prerequisite .....	C-602-2026, Aviation Support Equipment Technician Class A1

**c. Student Profiles.** There is no prerequisite skill required for the Navy operators. CBR-D is a collateral duty.

<b>SKILL IDENTIFIER</b>	<b>PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS</b>
AS 7618	C-602-2026 Aviation Support Equipment Technician Class A1

**d. Training Pipelines.** The following training tracks apply and are available in the OPNAV Training Management System.

<b>TRACK NUMBER</b>	<b>TRACK TITLE</b>
D/E-602-7090	(Afloat) Support Equipment Internal Combustion Engines and Related Systems Intermediate Maintenance

## **I. ONBOARD (IN-SERVICE) TRAINING**

### **1. Proficiency or Other Training Organic to the New Development**

**a. Maintenance Training Improvement Program.** Current planning is to adopt the AMTCS concepts to replace Maintenance Training Improvement Program (MTIP). AMTCS is scheduled to begin full implementation for fleet deployment in Fiscal Year (FY) 01. AMTCS is an on going effort.

**b. Aviation Maintenance Training Continuum System.** AMTCS will provide career path training to the Sailor or Marine from their initial service entry to the end of their military career. AMTCS concepts will provide an integrated system that will satisfy the training and administrative requirements of both the individual and the organization. The benefits will be manifested in the increased effectiveness of the technicians and the increased efficiencies of the management of the training business process. Where appropriate, capitalizing on technological advances and integrating systems and processes can provide the right amount of training at the right time, thus meeting the CNO's mandated "just-in-time" training approach.

Technology investments enable the development of several state-of-the-art training and administrative tools: IMI for the technicians in the Fleet in the form of ICW with CMI and CAI for the schoolhouse.

Included in the AMTCS development effort is the Aviation Maintenance Training Continuum System - Software Module, which provides testing [Test and Evaluation], recording [Electronic Certification Qualification Records], and a Feedback system. The core functionality of these AMTCS tools are based and designed around the actual maintenance-related tasks the

technicians perform, and the tasks are stored and maintained in a Master Task List data bank. These tools are procured and fielded with appropriate Commercial-Off-The-Shelf (COTS) hardware and software, i.e., Fleet Training Devices - Laptops, PCs, Electronic Classrooms, Learning Resource Centers (LRC), operating software, and network software and hardware.

Upon receipt of direction from OPNAV (N789H), AMTCS concepts are to be implemented and the new tools integrated into the daily training environment of all participating aviation activities and supporting elements. AMTCS will serve as the standard training system for aviation maintenance training within the Navy and Marine Corps, and is planned to supersede the existing MTIP and Maintenance Training Management and Evaluation Program (MATMEP).

**c. Shipboard Training.** Shipboard training is conducted by Unit Training Teams composed of shipboard personnel. These teams conduct training to establish and maintain proficiency, both as a unit and within multiple unit groups, in all mission areas. For SURFLANT/PAC (per COMNAVSURFLANT/PACINST 3502.2B), shipboard training typically begins with basic training after an inter-deployment overhaul availability. Initially, the Afloat Training Group (ATG) conducts training for the shipboard training teams, including all shipboard DC training, including the Damage Control Training Team (DCTT). The DCTT is responsible for coordinating and conducting all shipboard damage control training, including CBR-D training. The shipboard training teams then conduct the Command Assessment of Readiness and Training (CART) and the subsequent Tailored Ship Training Availability's (TSTA) to prepare the ship for the Final Evaluation Period (FEP) required prior to group exercises leading to deployment. The ISIC and the unit evaluate this portion of the training cycle with the ATG coordinating training support services and assisting in planning, observation, and evaluation.

The unit conducts intermediate training with its assigned deployment group to prepare for Composite Training Unit Exercises (COMPUEX) prior to deployment.

During deployment the unit participates in advanced training leading to fleet exercises, and conducts repetitive training to sustain operational effectiveness.

CBR-D drills and exercises throughout the training cycle are planned and carried out with the support of senior qualified CBR-D personnel (NEC 4805, 4811) or the DCTT. Course A-495-2062A, *CBR-D Operations and Training Specialist* is designed to train these personnel to plan, manage, and conduct onboard training.

At the beginning of the training cycle, the DCTT is trained by the ATG. The ATG requires current information on new development systems and equipment in order to conduct training as these systems are outfitted and installed. Plans to provide ATG with current information are addressed for each new development.

## **2. Personnel Qualification Standards. TBD**

**3. Other Onboard or In-Service Training Packages.** The Shipboard Training Enhancement Program (STEP) encompasses all shipboard training packages and is established to provide coordinated, systematic, and central determination of training requirements as well as development, distribution, maintenance, and life cycle support of STEP training materials. STEP is established by OPNAV N869 and is defined in OPNAVINST 1540.55. A major thrust of STEP is to produce and distribute multimedia and ICW in Compact Disc-Read Only Memory (CD-ROM) format. The STEP CD-ROM training packages are utilized at shipboard Learning Resource Multimedia Centers (LRMC), which include at least one CD-ROM equipped multimedia Personal Computer (PC). STEP ICW for new systems and equipment is funded by the developing activity and procured by NAVSEA. The STEP material is copied and distributed by CNET.

## **J. LOGISTICS SUPPORT**

**1. Manufacturer and Contract Numbers.** TBD

**2. Program Documentation.** A draft Joint Integrated Logistics Support Plan (JILSP) dated 3 May 2001, a draft Joint Operational Requirements Document (JORD) dated 1 June 2000, and a Test and Evaluation Mater Plan (TEMP) dated April 2001 are available.

**3. Technical Data Plan.** New Technical Manuals, Maintenance Requirements Cards (MRC), Maintenance Index Pages (MIP), Planned Maintenance System (PMS), or plans will be required for applicator systems and new SDKs.

**4. Test Sets, Tools, and Test Equipment.** TBD

**5. Repair Parts.** It is assumed that none of the Block I and II procurement items will be consumed in training or in a peacetime scenario. The contingency for two Military Theatres of War is assumed sufficient to cover any minor sparing requirements.

**6. Human Systems Integration.** The Human Systems Integration (HSI) Plan establishes the basis for effective integration of human factors engineering, manpower, personnel, training, health hazards, and safety considerations into the acquisition of the new development. The Executive Agent for the Naval Aviation System Team for all Naval Aviation Manpower, Personnel, and Training is Program Manager, Air (PMA) 205. The scope of PMA205's responsibilities includes identifying, planning for, and documenting training support resource requirements. Manpower, Personnel, and Training (MPT) requirements will be determined in accordance with OPNAVINST 1500.76 (TRPPM) and validated in the J-STRAP.

**K. SCHEDULES.** The Navy will require 1,228,584 gallons of decontaminants to replace current stockpiles. The Navy requirement for Block II applicators is 120 two-man portable, 40 transportable with 40 containment systems. The Navy has not identified a need for fixed site systems. A total of 7000 SDKs are required for Block III.

**1. Installation and Delivery Schedules.** The JSFXD is still in the concept development phase and, therefore, no final installation or delivery schedules have been established.

**2. Ready For Operational Use Schedule.** Planned dates for Initial Operational Capability (IOC) and Full Operational Capability (FOC) are as follows:

	<b>IOC</b>	<b>FOC</b>
Block I	4 <sup>th</sup> Qtr FY02	2 <sup>nd</sup> Qtr FY06
Block II	4 <sup>th</sup> Qtr FY04	2 <sup>nd</sup> Qtr FY06
Block III	4 <sup>th</sup> Qtr FY06	4 <sup>th</sup> Qtr FY06

**3. Time Required to Install at Operational Sites.** NA

**4. Foreign Military Sales and Other Source Delivery Schedule.** NA

**5. Training Device and Technical Training Equipment Delivery Schedule.** TBD

**L. GOVERNMENT-FURNISHED EQUIPMENT AND CONTRACTOR-FURNISHED EQUIPMENT TRAINING REQUIREMENTS.** NA.

**M. RELATED NTSPs AND OTHER APPLICABLE DOCUMENTS**

<b>DOCUMENT OR NTSP TITLE</b>	<b>DOCUMENT OR NTSP NUMBER</b>	<b>PDA CODE</b>	<b>STATUS</b>
Tailored Executive Analysis for Joint Service Fixed Site Decontamination System	Not Assigned	Marine Corps Systems Command	Draft Apr 00
Performance Specifications for Joint Service Fixed Site Decontamination System	Not Assigned	Marine Corps Systems Command	Draft May 00
Test and Evaluation Master Plan for Joint Service Fixed Site Decontamination System	Not Assigned	Marine Corps Systems Command	April 01 (Milestone B)

<b>DOCUMENT OR NTSP TITLE</b>	<b>DOCUMENT OR NTSP NUMBER</b>	<b>PDA CODE</b>	<b>STATUS</b>
Joint Integrated Logistic Support Plan for Joint Service Fixed Site Decontamination System	Not Assigned	Marine Corps Systems Command	Draft Seventh Update May 01
Life Cycle Cost Estimate for Joint Service Fixed Site Decontamination System	Not Assigned	Marine Corps System Command	Draft (Milestone I)

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